AQ10.2: Activity Question 2 - Not Graded

**This assignment will not be graded and is only for practice.**

**Note : This activity is for your practice purpose only. Your score in this will not count towards the Final score.**  
  
**(Use the below information for question number 1 to 3 only)**  
  
Consider the graph created in the lecture which represents whether two trains share a common station. If such a common station exists then a directed edge will be added between trains and that edge will be labelled with station name.

***1 point***

Assume an edge is drawn between the trains A**A** and B**B**. The train B**B** has in-degree 1. Choose the statement(s) is/are correct based on the graph drawn? [MSQ]

It is possible to switch from train A**A** to train B**B**.

It is possible to switch from train B**B** to train A**A**.

The trains A**A** and B**B** share only one common station.

The trains A**A** and B**B** do not have any common station.

***1 point***

A passenger travels on the train 02214 and switches to 12222 from a common station. Which is the common station from which the passenger can switch the train ?

Patna

Kolkata

Asansol

Pune

In the previous question, What is the maximum number of stations a passenger can

visit?

***1 point***

***1 point***

Graphs can also be used to predict the delay of trains.

True

False

**(Use the below information for question number 5 to 7 only)** 

A graph is made with trains as nodes and an edge is drawn between trains when they share a common station. If the graph contains only the trains which are passing through Nagpur then answer the following questions based on the graph.

What is the number of nodes in the graph?

***1 point***

What is the number of edges in the graph?

***1 point***

***1 point***

Is this graph a clique?

Yes

No